Appl. No.: 10/518,923 Amdt. dated 02/25/2010 Reply to Office Action of 11/25/2009

Amendments to the Claims:

1-22 (Cancelled)

23. (Currently Amended) A solid support comprising at least one electrically conducting and/or semiconducting region containing a reducible oxide on its surface, characterized in that at least one zone of said surface is functionalized with an electrografted organic film obtained from electroactive organic precursors each comprising at least one functional group of interest, said organic precursors being selected from vinyl or cyclic monomers bearing protic groups, and in that the number of functional groups of interest accessible for the formation of a covalent, ionic or hydrogen bond with a complementary group within said film represents at least 90% of the total number of functional organic groups of interest, and in that the density of the accessible functional groups of interest is between $10^4/\mu m^2$ and $10^{10}/\mu m^2$.

24. (Cancelled)

25. (Currently Amended) The support as claimed in claim 24 23, characterized in that the polymerizable monomers organic precursors are chosen from activated vinyl monomers and molecules that are cleavable by nucleophilic attack, corresponding respectively to formulae (I) and (II) below:

$$H_{2}C = \begin{pmatrix} A & & & \\ &$$

in which:

Appl. No.: 10/518,923 Amdt. dated 02/25/2010

Reply to Office Action of 11/25/2009

- A, B, R₁ and R₂, which may be identical or different, represent a hydrogen atom, a C₁-C₄ alkyl radical, a nitrile radical or an organic function chosen from the following functions: hydroxyl, amine: -NH_x with x = 1 or 3, thiol, carboxylic acid, ester, amide: -C(=O)NH_y in which y = 1 or 2, imide, imidoester, aromatic, acid halide: -C(=O)X in which X represents a halogen atom chosen from fluorine, chlorine or bromine, acid anhydride: -C(=O)OC(=O), nitrile, succinimide, phthalimide, isocyanate, epoxide, siloxane: -Si(OH)_z in which z is an integer between 1 and 3 inclusive, benzoquinone, carbonyldiimidazole, para-toluenesulfonyl, para-nitrophenyl chloroformate, ethylene and vinyl, or an organic group (or spacer arm) bearing at least one of the functions listed above; it being understood that at least one of A and B and that at least one of R₁ and R₂ represents one of said organic functions or an organic group bearing at least one of said functions;
- n, m and p, which may be identical or different, are integers between 0 and 20 inclusive.
- 26. (Currently Amended) The support as claimed in claim 25, characterized in that the activated vinyl monomers of formula (I) are chosen from methacryloyl succinimide, hydroxyethyl methacrylate, methacrylonitrile, acrylonitrile, glycidyl acrylate and glycidyl methacrylate, acrylic acid, methacrylic acid, aminopropylmethacrylamide, and aminohexylmethacrylamide, methacryloyl succinimide, acryloyl succinimide, methyl methacrylate, ethyl methacrylate, propyl methacrylate, butyl methacrylate, methyl cyanoacrylate, 2 and 4 vinylpyridine and 4 chlorostyrene.
- 27. (Currently Amended) The support as claimed in claim 25, characterized in that the molecules that are cleavable by nucleophilic attack, of formula (II), are chosen from ethylene oxide, substituted ethylene oxides, butyrolactone, caprolactones and in particular ε-caprolactone.
 - 28. (Cancelled)

Appl. No.: 10/518,923 Amdt. dated 02/25/2010

Reply to Office Action of 11/25/2009

29. (Previously Presented) The support as claimed in claim 23, characterized in that the electrically conducting or semiconducting surface is a stainless steel, steel, iron, copper, nickel, cobalt, niobium, aluminum, silver, titanium, silicon, titanium nitride, tungsten nitride or tantalum nitride surface, or a noble metal surface chosen from gold, platinum, iridium or platinum-iridium alloy surfaces.

30. (Currently Amended) The support as claimed in claim 23, characterized in that the electrografted organic film is obtained from electroactive organic precursors each comprising at least one functional group of interest, <u>said organic precursors being selected from vinyl or cyclic monomers bearing protic groups</u>, in a mixture with electroactive organic precursors not comprising a functional group of interest.